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FOOD NEWS

FOR CONSUMERS

Volume 6 Number 3 Holidays 1989

United States Department of Agriculture Food Safety and Inspection Service



Caution—Cook eggs in Holiday recipes

Party—Teenagers use leftover turkey

Research—Stemming salmonella in chicks

FOOD Les Crawford On Food Safety NEWS

FOR CONSUMERS

Holidays 1989 Vol. 6, No. 3

Food News for Consumers is published by USDA's Food Safety and Inspection Service, the agency charged with ensuring the safety, wholesomeness and proper labeling of the nation's meat and poultry supply. The magazine reports how FSIS acts to protect public safety, reporting research findings and regulatory efforts important in understanding how the agency works and how consumers can protect themselves against foodborne illness.

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Dr. Crawford also serves as the U.S. coordinator of the Codex Alimentarius Commission, a United Nations group that sets standards for food safety around the

Before coming to USDA, he was director of FDA's Center for Veterinary

Q. Dr. Crawford, we've heard a lot about food safety lately. What is being done to improve the safety of our food?

A. First of all, we need to put food safety into its proper perspective. U.S. meat and poultry are the most thoroughly inspected foods in the world. Food inspectors look at each animal slaughtered.

While it is impossible to create a totally risk-free environment, I think consumers face far less risk from food than from other daily activities, such as driving a car. At FSIS we are continually working to make meat and poultry even safer. A number of events occurred in 1989 to help ensure the safety of the meat and poultry you eat:

—FSIS is now using a battery of rapid tests in the plants to detect drugs, pesticides or species substitutions such as using less-expensive chicken instead of beef.

—The Residue Violation Information System was activated. It is a computer system that helps FSIS, the Food and Drug Administration and the Environmental Protection Agency trace residue violations to their source, which can range from the farm where the animals were raised to the feedlot to the truck which transports them to market.

—The Donald L. Houston Center for Meat and Poultry Sciences was established at Texas A&M University. At this center, FSIS veterinarians, food technologists and food inspectors can learn the latest techniques and science for safeguarding meat and poultry.

—"Food Safety Is No Mystery"—a training video for institutional food service workers—proved very popular. Since one worker can spread foodborne illness to scores of people, proper training is very important. So far, more than 11,000 organizations, ranging from hospitals and nursing homes to restaurants, have used the video.

—FSIS began to reach out to the Hispanic community and to older Americans, with food safety educational materials designed specifically for their needs.

—A record number of consumers—64,000—called USDA's Meat and Poultry Hotline (800 535-4555) this year for help on how to store and handle perishable foods.

As we enter 1990, scientists around the world are working to unlock secrets that will give our populations an even safer food supply. In the United States, we will continue to apply the newest scientific discoveries to help protect consumers.

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Have Turkey, Will Travel

Over the river and through the woods to Grandmother's house they go—for Thanksgiving dinner. And, in many cases, folks traveling this year will be attempting to carry the holiday bird with them. Callers to USDA's Meat and Poultry Hotline have many reasons for wanting to transport a turkey. Some want to continue family traditions since moving apart. Others hope to ease meal preparation stress for aging parents.

There are, of course, many safety considerations to be aware of whenever food is transported, but toting a large turkey really warrants prior planning.

Outbreaks of foodborne illness often occur after family gatherings. In the holiday frenzy, basic principles can be forgotten.

So here to help you are some "traveling turkey" questions USDA's Hotline home economists have answered for others.

USDA's Meat and Poultry Hotline, 1-800-535-4555, currently receives some 5,200 consumer calls each month. Q. My elderly grandmother loves to have the entire family in for Thanksgiving dinner, but handling that heavy turkey is a strain for her. I'll bring the turkey this year and plan to cook and freeze it several days before driving four hours to her house on Thanksgiving day. What is the best way to thaw and reheat the turkey?

A. Cooking ahead can be tricky. Be sure that you thoroughly cook the turkey to an internal temperature of 180° F, in an oven set no lower than 325° F. In this instance, it's better to cook the stuffing separately.

After a 15-minute stand time to let juices settle, carve all the meat from the turkey, leaving legs, thighs and wings intact, if you wish. This step is important to ensure rapid, even cooling and quick reheating. Although you won't have the whole bird to present to the family at the dinner, the meat will be safer, and more tasty.

Freeze the meat quickly in several small, shallow containers. When preparing to travel, pack the foods you'll take in an insulated cooler with an ice source.

To reheat the turkey, bake in a 325° F oven, or warm in the microwave to 165° F. Covering the meat with gravy or reserved natural juices will keep it moist.

Q. The company I work for gives a fresh turkey to employees each year at holiday time. I'd like to use it for the family dinner, but we visit relatives several hours away. I don't want to freeze it. How long will a fresh turkey keep unrefrigerated, and how can I transport it?

A. Any turkey, or other poultry and meats, should not be off refrigeration over two hours. Bacteria that can cause foodborne illness grow rapidly at room temperature and above.

A fresh turkey will keep refrigerated up to two days. After that time, it may begin to spoil.

If your turkey has remained under refrigeration, and you plan to cook it within two days after you receive it, it should be fine. Be sure to put it in an insulated cooler with a cold source such as ice or commercial "blue-jel" for the trip.

If your dinner will not be held within two days, it's wiser to cook it immediately and freeze it for transport. Q. My daughter, a recent bride, is in a panic about cooking Thanksgiving dinner. I told her that I'd bring the turkey. I'll cook it overnight in a 200° F oven so it will be ready for travel in the morning. How shall I wrap it to stay hot? Dinner is at one o'clock.

A. There are several potential problems with your plan. First, it's not safe to cook meat or poultry in an oven set lower than 325° F. It will take too long for the turkey to reach a temperature high enough to kill the bacteria that could be in the raw meat.

Second, unless your daughter lives very close by, it's not a good idea to try to travel with the hot turkey. A temperature of at least 140° F must be constantly maintained to keep hot food safe. That's hard to ensure without a heat source.

Also, holding the roast turkey that many hours between cooking it and serving dinner will result in dry, flavorless meat. It also increases the risk of food poisoning.

If possible, try to travel to your daughter's house in enough time to prepare the turkey there. The use of an oven cooking bag greatly reduces cooking time, or perhaps using a microwave oven is the answer.

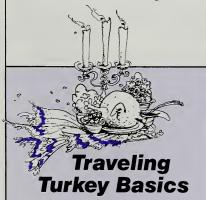
Q. The local butcher shop stuffs fresh raw turkey with the most wonderful dressing. I'd like to take one of these uncooked, stuffed turkeys to my family reunion. Any ideas on how to package it for travel?

We do not recommend purchasing an uncooked, prestuffed raw turkey. If it's the dressing you really like, perhaps the butcher will sell it to you separately. You could take the dressing along—frozen, and well packaged in an insulated container with a cold source—

and purchase a turkey at your destination.

Depending on the length of the trip, if you do intend to transport an unstuffed turkey, it is generally safer to start with a frozen bird. Using an insulated cooler and a cold source will approximate refrigerator conditions, so the turkey will begin to thaw en route. Figure a total thawing time of 24 hours per five pounds of bird.

Q. One of my dinner guests has insisted that she bring the



- Keep hot foods hot and cold foods cold.
- Transport cold or frozen foods in an insulated cooler with a cold source.
- Hot foods should be kept hot, and should not be held at room temperature over two hours.
 Wrap well to insulate.
- Do not attempt to partially cook meat and poultry ahead to finish cooking at the destination.
- When cooking in advance, divide foods into small, shallow containers and cool down quickly. This includes the whole turkey!
- Sometimes it's safer just to give up on the idea of taking your feast across the country! Look for new traditions when you get there.

turkey, complete with a special oyster stuffing, for our holiday dinner. Sounds great, except she mentioned that she plans to partially cook the bird before taking the three-hour drive, then finish it up in my oven. That doesn't sound safe to me. What do you think?

A. Partial cooking of meat or poultry is always an unsafe practice, and the stuffing makes it even more risky. The foods may not reach a high enough internal temperature in either cooking period to kill bacteria that may be in the raw product.

Given the time frame, the only way to safely transport these foods is to completely cook the turkey and stuffing separately in advance. Then carve the turkey and cool everything down in enough time to travel with the foods cold.

Perhaps you can talk your guest into inviting you to her house instead!

Q. In my family, everyone brings a favorite dish to the holiday dinner. What are some ideas for coordinating the menu?

A. The most important point to consider when assigning foods to family members is the type of food and the distance the person must travel. Cooked or raw perishable foods should not be off refrigeration over two hours. Hot foods must be kept hot.

People traveling a long distance might bring non-perishables such as rolls, breads, sauces, desserts, and fresh fruits or vegetables.

Those living within two hours of serving time could safely bring hot foods. Food should be wrapped well in foil, newspaper and towels. For further insulation, put the well-wrapped package in a cardboard box.

—Susan Templin

Cheers for "Eggstra" Safe
Holiday
Recipes

and candies
in helicase

by Cici Williamson and Pat Moriarty

You may want to update holiday recipes that use raw or lightly-cooked eggs to avoid the risk of foodborne illness. That's because we now know that refrigerated grade A eggs with clean, uncracked shells—those usually assumed to be safe—can be contaminated with Salmonella enteritidis bacteria.

Scientists strongly suspect that bacteria can be transmitted from infected laying hens directly into the interior of the eggs before the shells are formed.

Many government agencies are doing research on the problem, which is a worldwide epidemic. The problem is greater in Europe due to a more virulent strain of the bacteria called "phage type 4," which has not been found in U.S. poultry production.

Eggs must be cooked thoroughly in order to kill any bacteria—such as salmonella that may be present. If your eggnog recipe calls for raw eggs, it's not safe. Likewise, neither is Hollandaise sauce or mousse. Don't worry about cakes, cookies and candies though. Eggs used in baking get thoroughly cooked, and candy (such as divinity) containing eggs reaches temperatures far above that needed to kill bacteria. However, raw cookie dough isn't safe to eat!

But back to eggnog—way back. For centuries, our English ancestors made a similar milk and egg beverage that was cooked and served warm. Named for a small drinking vessel known as a "noggin," eggnog was often served in colonial times to colonists who were "under the weather."

Today it is a popular holiday drink made with raw eggs and served chilled, sometimes with spirits added. While adding alcohol may inhibit bacterial growth, it cannot be relied upon to kill bacteria which may be present in raw eggs.

HOLIDAY EGGNOG

1 quart two percent milk

6 eggs

1/4 teaspoon salt

1/2 cup sugar

1 teaspoon vanilla

1 cup whipping cream, whipped ground nutmeg

Calories: 135 per 1/2 cup Cholesterol: 120 mg. per 1/2 cup Yield: 2 quarts

Heat milk in large saucepan until hot (do not boil or scald). While milk is heating, beat together eggs and salt in a large bowl, gradually adding the sugar. Gradually add the hot milk mixture to the egg mixture. Transfer the mixture back to the large saucepan and cook on medium-low heat. Stir constantly with a whisk until the mixture thickens and just coats a spoon. Thermometer should register 160° F. Stir in vanilla. Cool quickly by setting pan in a bowl of ice or cold water and stirring for about 10 minutes. Cover and refrigerate until thoroughly chilled, several hours or overnight. Pour into a bowl or pitcher. Fold in whipped cream and dust with ground nutmeg.

To make safe eggnog, cook or microwave it to 160° F, or until the egg mixture thickens enough to coat a spoon (see accompanying recipes). Refrigerate it at once. When refrigerating a large amount of eggnog, divide it into several shallow containers so that it will cool quickly.

Do not fold raw, beaten egg whites into the cooked mixture. It hasn't been proven that raw egg whites are free of salmonella bacteria. Commercial eggnog is prepared with pasteurized eggs and requires no cooking. Eggnog made with egg substitutes is also safe since these frozen commercial products have been pasteurized.

Hollandaise sauce and chocolate mousse are usually made with raw eggs. Update these recipes for safety's sake. A safe Hollandaise sauce can be made with egg substitutes and margarine. This version has the added bonus of containing no cholesterol. When making chocolate mousse, melt the chocolate with the liquid called for in the recipe, add the eggs and continue to heat gently until the mixture reaches the safe temperature of 160° F.

Holidays are a fun but hectic time. By egg-proofing your recipes for safety, you'll have one less thing to worry about.

NEWS FOR EGG LOVERS

New studies indicate that today's average large egg contains about 213 milligrams of cholesterol. This is approximately 22 percent less than previously reported. More sophisticated nutrient analysis techniques and changes in how chickens are bred and fed account for this reduction.

LOW-CHOLESTEROL EGGNOG*

1/2 cup egg substitute

2 teaspoons sugar

1 can (13 oz.) evaporated skim

milk

3/4 cup skim milk 1 teaspoon vanilla

1 teaspoon rum flavoring (optional)

ground nutmeg

Whip egg substitute and sugar together and combine with two types of milk and flavoring. Mix well. Chill overnight. Dust with nutmeg before serving. *From the *New American Diet*—William Connor, M.D. and Sonja Connor, R.D. Simon and Schuster. N.Y., 1986.

ZERO-CHOLESTEROL HOLLANDAISE SAUCE

½ cup egg substitute2 tablespoons fresh lemon juice, pinch of cayenne pepper½ cup margarine

Calories: 35 per Tbsp. Cholesterol: 0 Yield: 1 cup

Calories: 387 per 1/2 cup

Yield: six 1/2 cup servings

Calories: 96 per 1/2 cup

Yield: 3 cups

Cholesterol: 4 mg. per 1/2 cup

Put egg substitute, lemon juice and cayenne pepper into a blender or food processor. Blend. Heat margarine to boiling, either on the stove or in a glass measuring cup in the microwave. Turn on blender and pour boiling margarine through lid. Blend. Sauce should thicken slightly.

CHOCOLATE MOCHA MOUSSE

6 ounces semisweet chocolate 1/4 cup water

1 teaspoon instant coffee powder

2 large eggs, lightly beaten

1/2 cup sugar

2 tablespoons coffee liqueur

1 cup heavy cream, whipped

Combine chocolate, water and coffee powder in a heavy saucepan. Heat over very low heat until chocolate melts. Add eggs. Stirring constantly, heat until mixture reaches 160° F. Stir in sugar and coffee liqueur. Cool quickly by setting pan in a bowl of cold water, stirring occasionally for about 10 minutes. Fold whipped cream into chocolate mixture. Spoon into six (4 oz.) dessert dishes. Refrigerate two hours or more before serving.

Charting Your Way to

Holidays and food, we almost say it in one breath, don't we?

That's because, often, in this fast-paced period, when we aren't preparing food, we're at someone else's house, eating it.

Or we're off to the mall for that last-minute gift, gobbling something on the run.

Or we're in front of the television watching bowl games and indulging in snack foods.

While all this is fun, some people have dietary constraints to remember. And, naturally, no one wants to put on extra pounds.

So here, from USDA's Human Nutrition Information Service, are some charts to help you make your food choices as wise and up-to-date as the other nice holiday things you hope to do for yourself and your family.

The editor

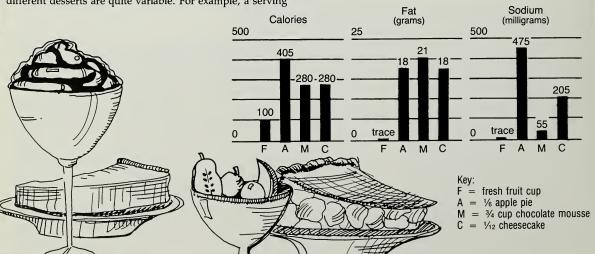
Snacking at the Shopping Mall?

Take a look at the calorie, fat, and sodium content of some popular items.

	Calories	Fat (grams)	Sodium (milligrams)
Frozen yogurt, 1 cup	210	4	100
Ice cream cone, single dip	190	9	55
Popcorn, with salt and butter, 1 cup	105	8	145
Soft pretzel with cheese	275	8	1,175
Chocolate chip cookie, 1 large	190	8	160
Hotdog, with mustard, relish, and onion	240	14	835
Bran muffin, 1 large	140	7	210
Danish pastry	220	12	220
Mixed nuts, 1/4 cup	225	21	240

Taking a Close Look At Desserts

Here are calorie, fat, and sodium values for a serving of some popular desserts. You will notice that serving sizes for different desserts are quite variable. For example, a serving of cheesecake is usually about half the size of a serving of apple pie.



Better Holiday Eating

A Muncher's Guide to Snacks and Desserts

Use this chart to find out more about the calories, fat, cholesterol, and sodium in your favorite snacks and to develop some new snack ideas.

	Approximate amount per serving				
FOOD	Calories		Cholesterol (milligrams)	Sodium (milligrams)	
Breads, cereals, and other grain products					
½ cup corn chips	70	4	0	108	
1 cup popcorn, unsalted, plain	30	trace	0	trace	
1 cup popcorn, salted and buttered	50	2	5	213	
4 whole-wheat crackers, 2 inches square	70	4	0	118	
16 cheese crackers, 1 inch square	80	5	10	179	
4 saltine crackers, 11/8 inches square	50	1	4	165	
Bagel, 3½ inches in diameter	200	2	0	245	
Bran muffin, 2½ inches in diameter	125	6	24	189	
10 thin salted pretzel sticks	10	trace	0	48	
1/8 15-inch cheese pizza	290	9	56	699	
Milk, cheese, yogurt					
1 ounce swiss cheese	105	8	26	74	
1 ounce Cheddar cheese	115	9	30	176	
1 ounce process American cheese	105	9	27	406	
1 cup skim milk	90	1	5	130	
1 cup lowfat milk, 2% fat	125	5	18	128	
1 cup whole milk	150	8	33	120	
8-ounce carton plain lowfat yogurt	145	4	14	159	
8-ounce carton lowfat yogurt with fruit	230	2	10	133	

Booklets to Order

For the new recipe-containing bulletins on putting the USDA/DHHS Dietary Guidelines into action, write the Consumer Information Center, Pueblo, Col. 81009. Specify title and order number. Enclose a check made out to the Superintendent of Documents. The booklets are:

"Preparing Foods and Planning Menus," 32 pp., \$2.50 (172-V) "Making Bag Lunches, Snacks and Desserts," 32 pp., \$2.50 (173-V) "Shopping for Food and Making Meals in Minutes," 36 pp.,

#3.00 (174-V) "Eating Better When Eating Out," 20 pp., \$1.50 (175-V).

			amount per	
FOOD	Calories		Cholesterol (milligrams)	
Vegetables				
2 carrot and 2 celery sticks	5	trace	0	10
3 broccoli florets	10	trace	0	9
6 fluid ounces tomato juice	30	trace	0	658
6 fluid ounces tomato juice, ''no-salt-added''	30	trace	0	18
1 medium dill pickle	5	trace	0	928
10 potato chips	105	_ 7	0	94
10 salted french fries	160	8	0	108
Fruits				
Small apple	60	trace	0	0
Banana	105	1	0	1
6 fluid ounces orange juice	85	trace	0	2
1 small box raisins, ½ ounce (about 1½ tablespoons)	40	trace	0	2
Nuts and seeds				
1/4 cup unsalted, roasted peanuts	210	18	0	2
1/4 cup salted, dry- roasted peanuts	210	18	0	293
2 tablespoons peanut butter	190	16	0	153
1/4 cup salted, roasted sunflower seeds	210	20	0	205
Desserts				
½ cup frozen yogurt	105	2	8	50
½ cup sherbert	135	2	7	44
½ cup ice milk	90	3	9	52
½ cup regular ice cream	135	7	30	58
Frosted brownie, 1½ inches by 1¾ inches by 7% inch thick	100	4	14	59
2 fig bars	105	2	14	90
2 oatmeal-raisin cookies, 2% inches in	103	2	14	90
diameter	120	5	1	74
Raised doughnut	235	13	21	222



The smell of cooked turkey still hasn't left the house, but the pie, cranberry sauce and relatives are long gone. What's left? A *lot* of leftover turkey.

Well, gather up your teenagers, because, with a little help from you, they can turn those leftovers into some quick and tasty party snacks.

Teens, like the rest of us, are increasingly interested in eating right. Our recipes for Double T (Terrific Turkey) Tacos and New England Turkey Tigers are good ways to use that great low-fat,

low-cholesterol (and leftover) turkey.

To keep your party free of foodborne illness as well, share these safety tips with the young people.

If you are using frozen turkey, thaw the meat in the refrigerator. Thawing meat on the counter can permit the growth of food poisoning bacteria which thrive at room temperature.

Before you begin preparing any meal, remind everyone to WASH THEIR HANDS. Hands are loaded with bacteria. If you fix the cold turkey salad for your Turkey Tigers ahead of time, keep it refrigerated until you're ready to make the sandwiches and serve.

When serving hot foods, like our turkey tacos, it's important to heat the meat to 165° F. Bringing the taco mixture to a boil and simmering for 15 minutes (3 minutes in the microwave) should do the job.

No perishable food should be held at room temperature for more than two hours. So don't put the treats out until you're ready to eat. After the meal, refrigerate leftovers promptly.

Finally, here are some microwave reminders:

- Use microwave cookware only. Other containers, such as margarine and whipped topping tubs, are not safe.
- Use potholders when removing plates from the microwave.
- Pull plastic wrap off heated food so steam escapes away from your hands and face.

If you or your kids have other questions about food safety, call USDA's Meat and Poultry Hotline at 1-800-535-4555, 10-4 weekdays, Eastern time.

NEW ENGLAND TURKEY TIGERS

Serves: 6 Calories: 440 for 2 rolls

3 cups diced, cooked turkey1 cup chopped celery½ cup chopped nuts

 ½ cup mayonnaise (to reduce calories and fat, try a lite mayonnaise)
 1 dozen finger rolls
 Optional: 1 cup apple chunks, grapes or raisins

Mix the turkey and other ingredients. If you want to be bold, add one or more of the apples, grapes or raisins. Refrigerate until ready to serve on the finger rolls.

DOUBLE "T" TACOS

Serves: 6

Calories: 406 for 2 tacos

3 cups shredded, cooked turkey 1 package (1.25 ounces)

taco seasoning mix

3/4 cup water 12 taco shells

2 medium diced tomatoes

2 cups shredded lettuce

2 cups shredded cheese (1 cup sharp cheddar, 1 cup Monterey Jack) 1 cup taco sauce

Optional: 1 cup sour cream (to reduce calories and fat, try a low-fat/nocholesterol sour cream substitute)

1 cup sliced black olives

Once the cutting and chopping is done, combine the turkey with the taco seasoning mix and water. Bring to a boil and then simmer uncovered for about 15 minutes. (Or use ½ cup of water and microwave on high for 3-5 minutes.) Heat the taco shells in the oven for 5 minutes. (Or microwave on high for 1 minute.)

News Wires

Natural Sugar Cuts Salmonella in Baby Chicks

Everyone has heard that you can contract salmonella food poisoning from improperly prepared chicken.

But you may not know that USDA researchers are hard at work searching for new ways to prevent that.

And they've just had a breakthrough. Researchers have discovered that salmonella infection in chicks can be blocked for just pennies per bird by adding lactose, or milk sugar, to their drinking water.

In tests, scientists added 2.5 percent lactose to the drinking water of day-old chicks. Two days later, the chicks were given oral doses of 100 million *Salmonella typhimurium* bacteria.

The scientists dosed other chicks with the bacteria, but did not give them the lactose.

When both groups of chicks were 10 days old, 53 percent of the chicks given lactose still showed some salmonella bacteria in the intestine. But 100 percent of those who hadn't received the lactose were still infected. And the lactose-treated chicks that tested positive for salmonella nonetheless had 99.9 percent fewer salmonella cells in their bodies than the untreated chicks.

Although studies have been

conducted only under lab conditions, they offer hope for reducing the incidence of salmonella in commercial poultry. The lactose treatment could cost as little as 2 cents per bird for the 10-day treatment period.

For further information, contact Dr. John R. DeLoach, 1-409-260-9484.

—Liz Lapping

The Average Egg Is Lower in Cholesterol

Are you one of those Americans who has reluctantly cut back on eggs because of their high cholesterol content? Well, we have good news for you. Recent USDA tests have shown that the majority of eggs in today's marketplace are significantly lower in cholesterol than was previously thought.

Why are today's eggs lower in cholesterol? There are several possible reasons—including poultry feed that is lower in fat and changes in production practices. However, according to some egg experts, most of the credit for the lowered level goes to more precise and sophisticated nutrient analysis techniques



which give more accurate measures.

Today's average large egg contains about 213 milligrams of cholesterol. This is approximately 22 percent less than the value of 274 milligrams used by USDA since 1976 in *Agriculture Handbook 8-1*. This new figure applies to most eggs in the supermarket.

So, at this point, consumers should be skeptical about eggs advertised as "low cholesterol" since they may not really be any lower than average.

Further, technically speaking, for an egg to be labeled "low cholesterol," it would have to meet stringent Food and Drug Administration requirements. FDA monitors nutrition labeling.

For more information, contact Ruth Matthews, Human Nutrition Information Service, 1-301-436-8491.

—Pat Moriarty

Listeria Coming Under More Scrutiny

Listeria monocytogenes bacteria are found frequently in the environment. They may be present on fruit, vegetables, milk, fish, meat and poultry. When foods are prepared and handled properly, listeria is not normally a problem.

But eating foods contaminated with listeria can cause a foodborne illness, listeriosis. The disease is rare but can be deadly. It can cause miscarriages in pregnant women and serious illness in newborns, the elderly, and those who are already ill.

Listeria is difficult to control because it can grow slowly on products even when they are in the refrigerator. For this reason, it is particularly important to pay attention to "use-by" dates on ready-to-eat refrigerated products such as hotdogs and lunchmeats. Once these products are opened, they should be kept no longer than one week.

USDA's Food Safety and Inspection Service (FSIS) began monitoring ready-to-eat meat and poultry products for listeria in 1987. Now, because a case of listeriosis has been associated with a poultry product, FSIS is increasing the number of ready-to-eat meat and poultry products that will be tested for *Listeria monocytogenes* each year.

FSIS tests items such as a one-pound, sealed package of hotdogs that you might purchase in the grocery store. If the product is found to contain *Listeria monocytogenes*, FSIS and the company that produced it take immediate steps to notify all stores and consumers that may have purchased the product to have them return it.

A similar monitoring plan covers sliced lunchmeats and other ready-to-eat items that are sold at deli counters.

When listeria is found in a product, FSIS conducts additional tests at the plant that produced the contaminated product to ensure that problems are corrected and only safe products reach consumers.

-Susan Rehe

Lean Little Piggies Go to Market, While Fat Piggies Stay Home . . .

Too much fat in the diet is a major contributor to health problems in the United States today, such as adult-onset diabetes, heart attack, stroke and kidney problems.

So USDA's Agricultural Research Service scientists are studying ways to reduce the amount of fat in pigs and other livestock used for human food.

They have developed a new test that can help livestock breeders produce leaner pigs and other meat animals.

"We can tell with a harmless blood test which young pigs will be fat and which will be lean," says Dr. Gary J. Hausman, a physiologist with the Animal Physiology Research unit in Athens, Georgia.

When breeders and farmers know which pigs in a litter will become lean hogs, they can save the time and money now wasted in raising those destined to be fat.

"In the future, a predictive test for obesity may even have a use in human medicine. It would alert physicians and parents of the possibility of a child's becoming a fat adult. An early program of diet, exercise, and possibly medical treatment might prevent adult obesity.

For more information, contact Dr. Gary J. Hausman, at 1-404-546-3224.

—Liz Lapping

ANNOUNCING!

The Meat and Poultry Hotline has expanded its hours for the holiday season.

Call **1-800-535-4555** for advice on the safe handling, storage, and preparation of turkey, and other meat and poultry products.



Monday-Friday, Nov. 1-30 9 to 5, EST

Saturday-Sunday, Nov. 18-19 9 to 5, EST

Thanksgiving Day, Nov. 23 8 to 2, EST

Monday-Friday, Year-round 10 to 4, EST

A public service of this publication and the U.S. Department of Agriculture.



TURKEY BASICS FROM USDA

BUYING A TURKEY

FROZEN

Buy any time but keep frozen until 1-4 days before cooking. (See THAW)

1 lb. per person

FROZEN PRE-STUFFED

Buy any time. Keep frozen until ready to cook. DO NOT THAW.

1-1/4 lbs. per person

FRESH

Buy 1-2 days before cooking. DO NOT BUY PRE-STUFFED.

1 lb. per person

PRE-COOKED

Serve immediately within 1-2 hours of removal from oven.

1 lb. per person

THAWING A TURKEY (For frozen, unstuffed turkeys only)

THAWING TIME IN THE REFRIGERATOR

(Whole Turkey)

8 to 12 pounds...... 1 to 2 days

12 to 16 pounds......2 to 3 days

16 to 20 pounds...... 3 to 4 days

20 to 24 pounds...... 4 to 5 days

IN COLD WATER (Whole Turkey)

THAWING TIME

THAWING IN A MICROWAVE

Check manufacturer's instruction for the size turkey that will fit in your oven, the minutes per pound, and the power level to use for thawing.

After thawing, remove neck and giblets, wash turkey inside and outside with cold water, drain well.

MASH HANDS, UTENSILS, SINK, AND ANYTHING ELSE THAT HAS COME IN CONTACT WITH RAW TURKEY.

STUFFING A TURKEY

STUFFING IN THE TURKEY

Mix and stuff ingredients immediately before putting in oven. Stuff lightly. Cooking time takes longer. Allow 3/4 cup stuffing per lb./turkey.

STUFFING SEPARATE

If you are in a hurry, bake stuffing in greased, covered casserole during last hour while turkey roasts.

ROASTING A TURKEY

Timetable for Roasting Fresh or Thawed Turkey in a 325°F Oven

WEIGHT (pounds)	UNSTUFFED (hours)	STUFFED (hours)
4 to 6 (breasts) 6 to 8 8 to 12 12 to 16 16 to 20 20 to 24	1-1/2 to 2-1/4 2-1/4 to 3-1/4 3 to 4 3-1/2 to 4-1/2 4 to 5 4-1/2 to 5-1/2	Not applicable 3 to 3-1/2 3-1/2 to 4-1/2 4-1/2 to 5-1/2 5-1/2 to 6-1/2 6-1/2 to 7
24 to 28	5 to 6-1/2	7 to 8-1/2

Place turkey breast-side up on a rack in a shallow roasting pan. Do not add water. Cover turkey with loose tent of heavy-duty aluminum foil. Remove foil 20-30 minutes before roasting is done.

WHEN TURKEY IS DONE, REMOVE STUFFING. LET BIRD STAND 15 MINUTES FOR BETTER CARVING. THEN SERVE SLICED TURKEY AND STUFFING.

STORING YOUR LEFTOVERS

Divide turkey into small portions and store in several small or shallow containers. Turkey will keep 3-4 days in refrigerator. Use stuffing and gravy within 1-2 days. Bring gravy to rolling boil before serving. For best quality, use frozen turkey, gravy, and stuffing within one month.

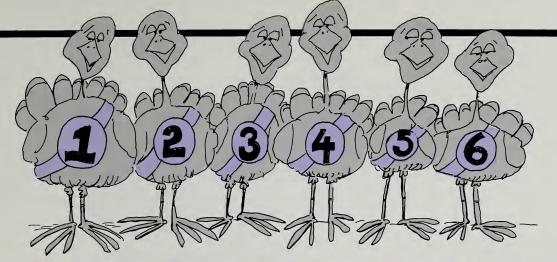
OTHER QUESTIONS ON YOUR HOLIDAY TURKEY?

If you have questions about your Holiday Turkey, call the USDA Meat and Poultry Hotline at 1-800-535-4555.

HOURS: Monday-Friday, Nov. 1-30, 9 to 5, EST

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SIX TOP TURKEY QUESTIONS

by Herb Gantz

In four years of answering some 20,000 calls on turkey handling and preparation, USDA's Meat and Poultry Hotline home economists say these are the six questions they hear most often.

1. How long will turkey last in the freezer? Is it safe to use a turkey I've had frozen since last Thanksgiving?

Yes, a whole frozen turkey can be stored in your home freezer at 0° F for up to one year without appreciable loss of quality. To prevent freezer burn, wrap the turkey in heavy freezer paper.

2. Which tastes better, fresh or frozen turkey? If I choose a fresh turkey, how long will it keep in my refrigerator?

There is no significant difference in quality between a fresh turkey and a frozen one. But you can only keep a fresh turkey refrigerated 1-2 days before cooking.

3. How should I thaw turkey? How can I quickly thaw a turkey when time has run out?

Thawing your turkey in the

refrigerator is the preferred method. Allow one day for each five pounds.

In a hurry? Thaw the turkey in a clean sink. Put it in a heavy freezer bag secured with a twist tie. Cover the bird with cold water, changing the water every 30 minutes to keep it cool. Allow 6-9 hours for a 12 to 16 pound turkey, 9-11 hours for a 16 to 20 pound bird.

And turkey can be thawed in the microwave oven, if it will fit. Be ready to cook the bird as soon as it's thawed.

4. What's the safest way to stuff a turkey? Is it okay to stuff a large turkey?

You can stuff a turkey, but do it just before you put it in the oven. To save time, chop up and refrigerate your stuffing ingredients the night before. Combine everything the next morning just before roasting. Stuff the bird loosely.

5. What's the best way to cook a picture-perfect, delectable turkey?

There are several cooking methods which will provide a delicious, tender turkey. You can roast the bird uncovered in a 325° F oven. This will give you dryer meat but a great roasted flavor. Or you can put the turkey in an oven cooking bag for a more moist bird in a shorter time. Other cooking methods include the microwave, rotisserie or outdoor kettle grill.

6. Can I cook the turkey the day before Thanksgiving? How do I safely store it and then warm it up for dinner?

Cooking ahead requires special attention to safe handling. First, cook the bird to an internal temperature of 180° F in an oven set no lower than 325° F. Bake stuffing separately.

When roasted, let the bird stand for 15 minutes. Carve the meat off, leaving legs, thighs and wings intact if you like.

Refrigerate the turkey in small, shallow containers.

On Thanksgiving Day, reheat the meat in a 325° F oven or warm in the microwave. To keep meat tender when using a conventional oven, cover it with gravy or the natural cooked juices.

Serve the heated slices on a platter, with the whole pieces garnishing the edges.

□



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